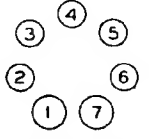




6F7

RCA-6F7 TRIODE-PENTODE

Heater *	Coated Uni-potential Cathode	
Voltage	6.3	a-c or d-c volts
Current	0.3	amp.
Direct Interelectrode Capacitances:		
Triode Unit:		
Grid to Plate	2.0	μuf
Grid to Cathode	2.5	μuf
Plate to Cathode	3.0	μuf
Pentode Unit:		
Grid to Plate	0.008 max. [⊙]	μuf
Input	3.2	μuf
Output	12.5	μuf
Overall Length	4-9/32" to 4-17/32"	
Maximum Diameter	1-9/16"	
Bulb	ST-12	
Cap	Small Metal	
Base	Small 7-Pin ^Δ	
Pin 1-Heater	(2)	Pin 5-Triode Grid
Pin 2-Pentode Plate	(4)	Pin 6-Cathode
Pin 3-Pentode Screen	(5)	Pin 7-Heater
Pin 4-Triode Plate	(7)	Cap - Pentode Grid
		
BOTTOM VIEW		
AMPLIFIER SERVICE		
	Triode Unit	Pentode Unit
Plate Voltage	100 max.	100 250 max. volts
Screen Voltage	-	100 max. volts
Grid Voltage	-3	-3 min. volts
Amp. Fact.	8	300 900
Plate Res.	16000	290000 850000 ohms
Mut. Cond.	500	1050 1100 μmhos
Mut. Cond. at -35 volts bias	-	9 10 μmhos
Plate Cur.	3.5	6.3 6.5 ma.
Screen Cur.	-	1.6 1.5 ma.
CONVERTER SERVICE		
	Triode Unit	Pentode Unit
Plate Voltage	100 max.	250 max. volts
Screen Voltage	-	100 max. volts
Grid Voltage	##	-3 min.* volts
Oscillator Plate Cur. (av.)	4 max.	- ma.
Typical Operation:		
Plate	100 [⊙]	250 volts
Screen	-	100 [⊙] volts
Grid Bias	##	-10 [⊙] volts
Plate Resistance	-	2 megohms
Conversion Conductance	-	300 μmhos
D-c Plate Current	2.4	2.8 ma.
D-c Grid Current	0.15	0 ma.
Screen Current	-	0.6 ma.
Oscillator Peak Voltage Input	-	7 volts
<p>^{##} Usually obtained by means of a grid leak.</p> <p>^{**} Grid bias should be at least 3 volts greater than the peak oscillator voltage applied to the pentode grid.</p> <p>[⊙] May be obtained from 250-volt source through 60000-ohm dropping resistor.</p> <p>[⊙] Obtained by means of 1700-ohm self-biasing (cathode) resistor.</p> <p>* In circuits where the cathode is not directly connected to the heater, the potential difference between heater and cathode should be kept as low as possible.</p> <p>^Δ Requires different socket than medium 7-pin base.</p> <p>[⊙] With shield-can.</p>		

SEPT. 1, 1935

RCA RADIODRON DIVISION
RCA MANUFACTURING COMPANY, INC.

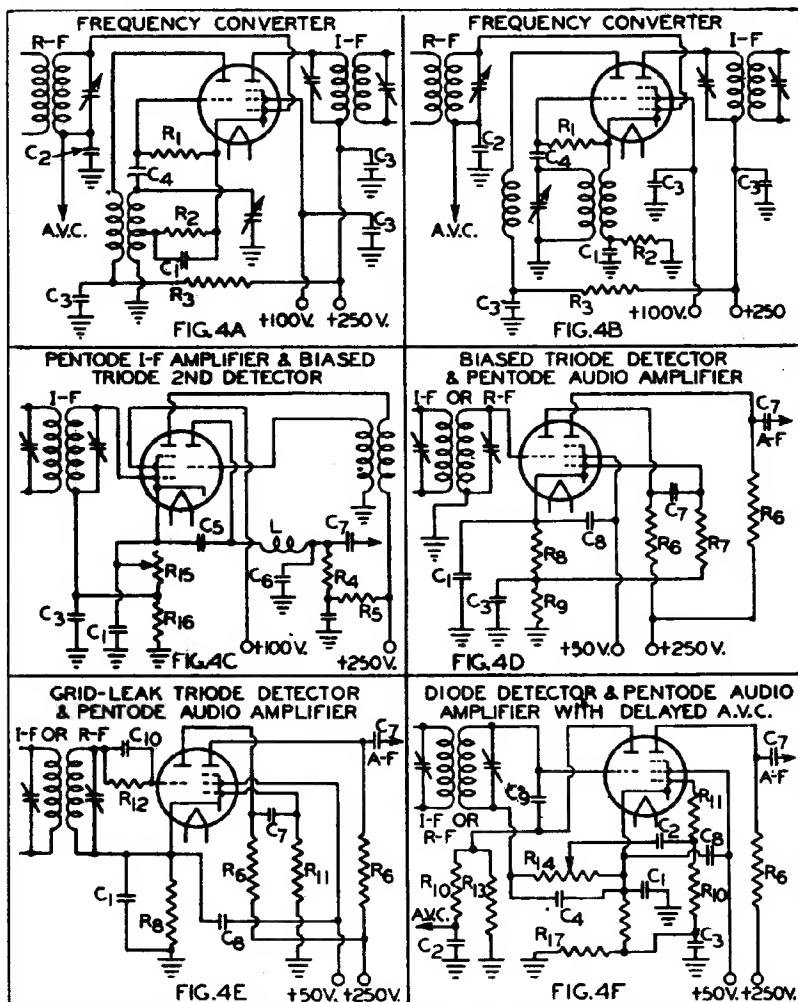
DATA

6F7



RCA-6F7

TYPICAL CIRCUITS



APPROXIMATE VALUES

C₁=5 μ f
 C₂=0.05 μ f
 C₃=0.1 μ f
 C₄=0.0002 μ f
 C₅=0.0024 μ f
 C₆=0.00016 μ f
 C₇=0.01 μ f
 C₈=0.5 μ f
 C₉=0.0005 TO 0.001 μ f
 C₁₀=0.00025 μ f
 L=I-F CHOKE COIL
 R₁=OSCILLATOR GRID LEAK-0.1 MEGOHM

R₂=PENTODE SELF-BIASING RESISTOR-1500 OHMS
 R₃=VOLTAGE DROPPING RESISTOR-50000 OHMS
 R₄=PLATE COUPLING RESISTOR-170000 OHMS
 R₅=FILTER RESISTOR-30000 OHMS
 R₆=PLATE COUPLING RESISTOR-300000 OHMS
 R₇=PENTODE GRID LEAK-0.5 MEGOHM
 R₈=PENTODE SELF-BIASING RESISTOR-5000 OHMS
 R₉=10000 OHMS. R₉+R₈=TRIODE BIASING RESISTOR
 R₁₀=FILTER RESISTOR-1.0 MEGOHM
 R₁₁=GRID RESISTOR-500000 OHMS
 R₁₂=TRIODE GRID LEAK-1.0 MEGOHM
 R₁₃=A.V.C. DIODE LOAD-1.0 MEGOHM
 R₁₄=A-F DIODE-LOAD POTENTIOMETER-0.5' MEGOHM
 R₁₅=PENTODE SELF-BIASING RES. 4000 OHMS VAR.
 R₁₆=1500 OHMS. R₁₆+R₁₅=TRIODE BIASING RESISTOR

The license extended to the purchaser of tubes appears in the License Notice accompanying them. Information contained herein is furnished without assuming any obligations.

SEPT. 1, 1935

RCA RADIOTRON DIVISION
 RCA MANUFACTURING COMPANY, INC.

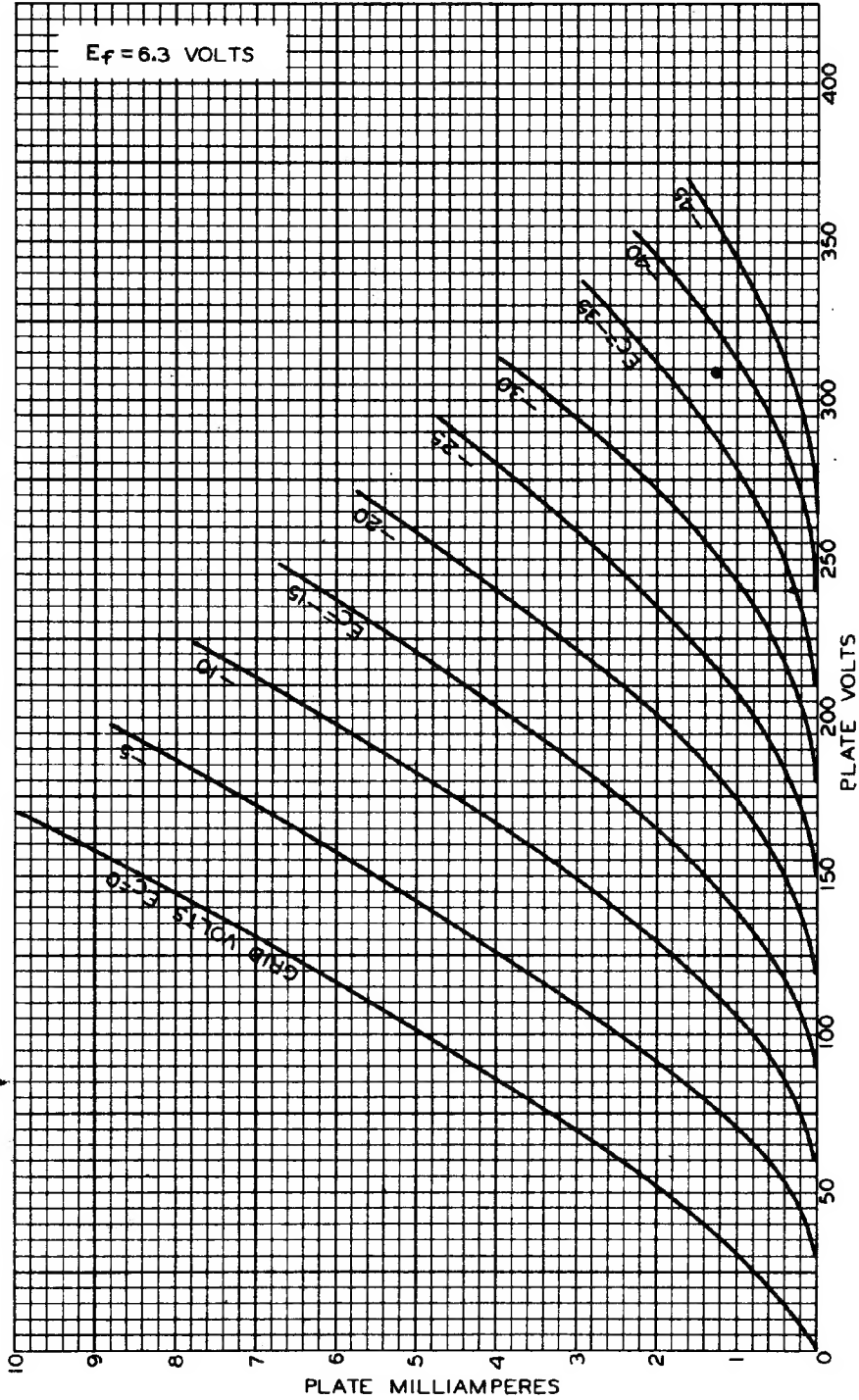
CE-4302

RCA Radiotron
RCA-6F7

Cunningham
RADIO TUBES
C-6F7

6F7

AVERAGE PLATE CHARACTERISTICS
TRIODE UNIT



DEC. 5, 1933

925-5426

6F7



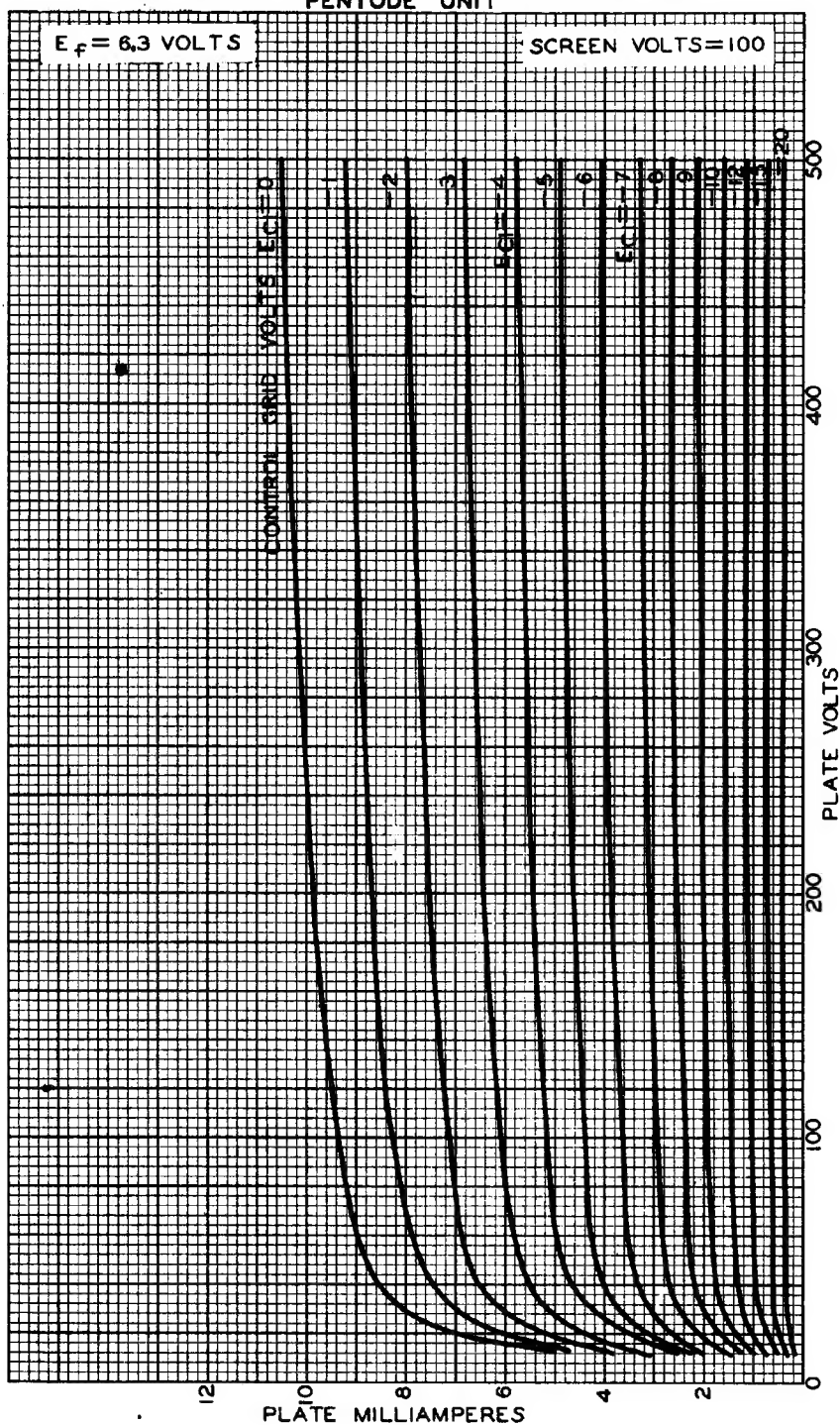
Radiotron

RCA-6F7

Cunningham
RADIO TUBES

C-6F7

AVERAGE PLATE CHARACTERISTICS
PENTODE UNIT



AUG. 18, 1933

92S-5360